WEST Search History

Hide Items Restore Clear Cancel

DATE: Friday, March 10, 2006

Hide?	Set Name	Query	Hit Count
	DB = PGPB, U	JSPT, USOC, EPAB, JPAB, DWPI;	PLUR=YES; OP=ADJ
	L4	L3 near5 dehydrogenase	34
	L3	2-keto-D-glucon\$3 or kdg	293
	DB=USPT; I	PLUR=YES; OP=ADJ	
	L2	L1.pn.	1
	L1	5795761	12

END OF SEARCH HISTORY

Record List Display Page 1 of 5

Hit List

First Hit Clear Generate Collection Frint Fwd Refs Bkwd Refs Generate OACS

Search Results - Record(s) 1 through 10 of 34 returned.

☐ 1. Document ID: US 20050227337 A1

Using default format because multiple data bases are involved.

L4: Entry 1 of 34

File: PGPB

Oct 13, 2005

PGPUB-DOCUMENT-NUMBER: 20050227337

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050227337 A1

TITLE: Method for producing ascorbic acid intermediates

PUBLICATION-DATE: October 13, 2005

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Boston, Matthew Grant San Carlos CA US Swanson, Barbara A. San Francisco CA US

US-CL-CURRENT: 435/126; 435/138, 435/252.3

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

☐ 2. Document ID: US 20050208662 A1

L4: Entry 2 of 34 File: PGPB Sep 22, 2005

PGPUB-DOCUMENT-NUMBER: 20050208662

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050208662 A1

TITLE: Enterobacteriaceae fermentation strains

PUBLICATION-DATE: September 22, 2005

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Fowler, Timothy San Carlos CA US Causey, Stuart C. Palo Alto CA US

US-CL-CURRENT: 435/488; 435/252.3

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

Record List Display Page 2 of 5

☐ 3. Document ID: US 20050112734 A1

L4: Entry 3 of 34 File: PGPB

May 26, 2005

May 19, 2005

PGPUB-DOCUMENT-NUMBER: 20050112734

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050112734 A1

TITLE: Metabolically engineered bacterial strains having non-functional endogenous

gluconate transporters

PUBLICATION-DATE: May 26, 2005

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY
Dodge, Timothy C.	Sunnyvale	CA	US
Kumar, Manoj	Fremont	CA	US
Rashid, M. Harunur	Sunnyvale	CA	US
Valle, Fernando	Burlingame	CA	US

US-CL-CURRENT: 435/126; 435/193, 435/252.3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Drawe I

File: PGPB

☐ 4. Document ID: US 20050106693 A1

PGPUB-DOCUMENT-NUMBER: 20050106693

PGPUB-FILING-TYPE: new

L4: Entry 4 of 34

DOCUMENT-IDENTIFIER: US 20050106693 A1

TITLE: Metabolically engineered bacterial strains having enhanced 2-keto-D-

gluconate accumulation

PUBLICATION-DATE: May 19, 2005

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY Dodge, Timothy C. Sunnyvale CA US Rashid, M. Harunar Sunnyvale CA US Valle, Fernando Burlingame CA US

US-CL-CURRENT: <u>435/138</u>; <u>435/252.3</u>, <u>435/252.31</u>, <u>435/252.33</u>, <u>435/488</u>

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWC	Draw, De

☐ 5. Document ID: US 20050080248 A1

L4: Entry 5 of 34

File: PGPB

Apr 14, 2005

PGPUB-DOCUMENT-NUMBER: 20050080248

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050080248 A1

TITLE: Multimeric oxidoreductases

PUBLICATION-DATE: April 14, 2005

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Caldwell, Robert M. Belmont CA US
Rashid, M. Harunur Sunnyvale CA US
Valle, Fernando Burlingame CA US

US-CL-CURRENT: <u>536/23.2</u>; <u>435/189</u>, <u>435/320.1</u>, <u>435/325</u>, <u>435/69.1</u>

Full Titl	e Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC	Draw, De
	2 Augusti						A A BAST STORE				

☐ 6. Document ID: US 20050032088 A1

L4: Entry 6 of 34 File: PGPB Feb 10, 2005

PGPUB-DOCUMENT-NUMBER: 20050032088

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20050032088 A1

TITLE: 2,5-DKG permeases

PUBLICATION-DATE: February 10, 2005

INVENTOR-INFORMATION:

CITY NAME STATE COUNTRY Dartois, Veronique A. San Diego ÇA US Hoch, James A. La Jolla CA US Valle, Fernando Burlingame CA US Kumar, Manoj US Fremont CA

US-CL-CURRENT: 435/6; 435/193, 435/320.1, 435/325, 435/69.1, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Drawe Di
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☐ 7. Document ID: US 20040180413 A1

L4: Entry 7 of 34

File: PGPB

Sep 16, 2004

PGPUB-DOCUMENT-NUMBER: 20040180413

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040180413 A1

Record List Display Page 4 of 5

TITLE: Method for producing ascorbic acid intermediates

PUBLICATION-DATE: September 16, 2004

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Boston, Matthew Grant San Carlos CA US Swanson, Barbara A. San Francisco CA US

US-CL-CURRENT: 435/126

Draint L	KUMU	Claims	Attachments	Sequences	Reference	Date	Classification	Review	Front	Citation	Title	Full
										-		

□ 8. Document ID: US 20040030113 A1

L4: Entry 8 of 34 File: PGPB Feb 12, 2004

PGPUB-DOCUMENT-NUMBER: 20040030113

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040030113 A1

TITLE: 2,5-Dkg permeases

PUBLICATION-DATE: February 12, 2004

INVENTOR-INFORMATION:

CITY COUNTRY NAME STATE Kumar, Manoj Fremont CA US CA US Valle, Fernando Burlingame San Diego CA US Dartois, Veronique A. La Jolla CA US Hoch, James A.

US-CL-CURRENT: 536/23.5; 530/350

☐ 9. Document ID: US 20040029234 A1

L4: Entry 9 of 34 File: PGPB Feb 12, 2004

PGPUB-DOCUMENT-NUMBER: 20040029234

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040029234 A1

TITLE: Enhanced 2-keto-1-gulonic acid production

PUBLICATION-DATE: February 12, 2004

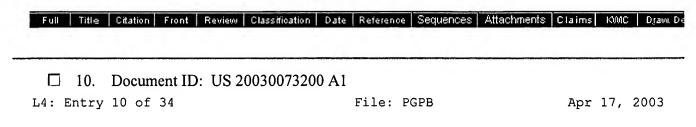
INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Record List Display Page 5 of 5

Kumar, Manoj	Fremont	CA	US
Valle, Fernando	Burlingame	CA	US
Dartois, Veronique A.	San Diego	CA	US
Hoch, James A.	La Jolla	CA	US

US-CL-CURRENT: <u>435/75</u>; <u>435/252.3</u>, <u>435/471</u>



PGPUB-DOCUMENT-NUMBER: 20030073200

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030073200 A1

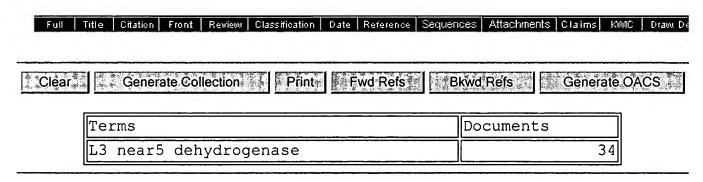
TITLE: Uncoupled productive and catabolic host cell pathways

PUBLICATION-DATE: April 17, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY
Dodge, Timothy C. Sunnyvale CA US
Valle, Fernando Burlingame CA US

US-CL-CURRENT: 435/85; 435/105, 435/89



Display Format: - Change Format

Previous Page Next Page Go to Doc#

Hit List

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Generate OACS

Search Results - Record(s) 11 through 20 of 34 returned.

☐ 11. Document ID: US 20030040086 A1

Using default format because multiple data bases are involved.

L4: Entry 11 of 34

File: PGPB

Feb 27, 2003

PGPUB-DOCUMENT-NUMBER: 20030040086

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030040086 A1

TITLE: Methods for the production of products in host cells

PUBLICATION-DATE: February 27, 2003

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Dodge, Timothy C. Sunnyvale CA US Valle, Fernando Burlingame CA US

US-CL-CURRENT: 435/126; 435/137, 435/146

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

☐ 12. Document ID: US 20020177198 A1

L4: Entry 12 of 34 File: PGPB Nov 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020177198

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020177198 A1

TITLE: METHOD FOR PRODUCING ASCORBIC ACID INTERMEDIATES

PUBLICATION-DATE: November 28, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Boston, Mathew Grant San Carlos CA US Swanson, Barbara A. San Francisco CA US

US-CL-CURRENT: 435/132; 435/69.1

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw. De

☐ 13. Document ID: US 20020177197 A1

L4: Entry 13 of 34

File: PGPB

Nov 28, 2002

PGPUB-DOCUMENT-NUMBER: 20020177197

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020177197 A1

TITLE: METHOD FOR PRODUCING ASCORBIC ACID INTERMEDIATES

PUBLICATION-DATE: November 28, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

BOSTON, MATTHEW GRANT SAN CARLOS CA US SWANSON, BARBARA A. SAN FRANCISCO CA US

US-CL-CURRENT: 435/132; 435/138, 435/252.3, 435/41

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

☐ 14. Document ID: US 20020120119 A1

L4: Entry 14 of 34 File: PGPB

Aug 29, 2002

PGPUB-DOCUMENT-NUMBER: 20020120119

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020120119 A1

TITLE: 2,5-DKG permeases

PUBLICATION-DATE: August 29, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY Dartois, Veronique A. San Diego CA US La Jolla CA US Hoch, James A. Valle, Fernando Burlingame CA US US Kumar, Manoj Fremont CA

US-CL-CURRENT: 536/23.2; 435/226, 435/320.1, 435/325, 435/69.1

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

☐ 15. Document ID: US 20020090689 A1

L4: Entry 15 of 34 File: PGPB Jul 11, 2002

PGPUB-DOCUMENT-NUMBER: 20020090689

Record List Display Page 3 of 5

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020090689 A1

TITLE: Production of ascorbic acid

PUBLICATION-DATE: July 11, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Kumar, Manoj Fremont CA US

US-CL-CURRENT: 435/138; 435/254.2, 435/254.22

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw. De

☐ 16. Document ID: US 20020090688 A1

L4: Entry 16 of 34 File: PGPB Jul 11, 2002

PGPUB-DOCUMENT-NUMBER: 20020090688

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020090688 A1

TITLE: Production of ascorbic acid

PUBLICATION-DATE: July 11, 2002

INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Kumar, Manoj Fremont CA US

US-CL-CURRENT: 435/138; 435/254.1, 435/254.22

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

☐ 17. Document ID: US 20020076771 A1

L4: Entry 17 of 34 File: PGPB Jun 20, 2002

PGPUB-DOCUMENT-NUMBER: 20020076771

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020076771 A1

TITLE: Production of ascorbic acid

PUBLICATION-DATE: June 20, 2002

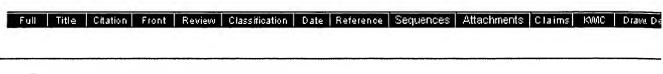
INVENTOR-INFORMATION:

NAME CITY STATE COUNTRY

Kumar, Manoj Fremont CA US

Record List Display Page 4 of 5

US-CL-CURRENT: 435/126; 435/254.2



☐ 18. Document ID: US 6916646 B1

L4: Entry 18 of 34

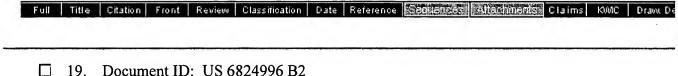
File: USPT

Jul 12, 2005

US-PAT-NO: 6916646

DOCUMENT-IDENTIFIER: US 6916646 B1

TITLE: Enterobacteriaceae fermentation strains



19. Document ID: US 0824990 B.

L4: Entry 19 of 34

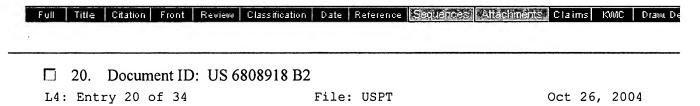
File: USPT

Nov 30, 2004

US-PAT-NO: 6824996

DOCUMENT-IDENTIFIER: US 6824996 B2

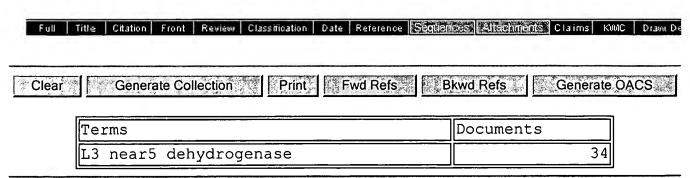
TITLE: Production of ascorbic acid



US-PAT-NO: 6808918

DOCUMENT-IDENTIFIER: US 6808918 B2

TITLE: Production of ascorbic acid



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Generate OACS

Search Results - Record(s) 21 through 30 of 34 returned.

☐ 21. Document ID: US 6720168 B2

Using default format because multiple data bases are involved.

L4: Entry 21 of 34

File: USPT

Apr 13, 2004

US-PAT-NO: 6720168

DOCUMENT-IDENTIFIER: US 6720168 B2

TITLE: 2,5-DKG permeases

DATE-ISSUED: April 13, 2004

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Dartois; Veronique A. San Diego CA Hoch; James A. La Jolla CA

Valle; Fernando Burlingame CA Kumar; Manoj Fremont CA

US-CL-CURRENT: 435/72; 435/252.33, 536/27.2

Full Title Citation Front Review Classification Date Reference Sequences Attackinents Claims KWC Draw. Da

☐ 22. Document ID: US 6599722 B2

L4: Entry 22 of 34

File: USPT

Jul 29, 2003

US-PAT-NO: 6599722

DOCUMENT-IDENTIFIER: US 6599722 B2

TITLE: Method for producing ascorbic acid intermediates

Full Title Citation Front Review Classification Date Reference Sequences Artachments Claims KMC Draw De

☐ 23. Document ID: US 6358715 B1

L4: Entry 23 of 34

File: USPT

Mar 19, 2002

US-PAT-NO: 6358715

DOCUMENT-IDENTIFIER: US 6358715 B1

Record List Display Page 2 of 4

TITLE: Production of ascorbic acid

Full Title Citation Front Review Classification Date Reference **Sequences Attachments** Claims KMC Draw. De

☐ 24. Document ID: US 6337199 B1

L4: Entry 24 of 34

File: USPT

Jan 8, 2002

US-PAT-NO: 6337199

DOCUMENT-IDENTIFIER: US 6337199 B1

TITLE: Membrane-bound gluconate dehydrogenase, gene sequence encoding the same and production of 2-keto-D-gluconate using transformed recombinant E-coli

Full Title Citation Front Review Classification Date Reference Sequences Strachments Claims KWIC Draw. De

☐ 25. Document ID: US 5856156 A

L4: Entry 25 of 34

File: USPT

Jan 5, 1999

US-PAT-NO: 5856156

DOCUMENT-IDENTIFIER: US 5856156 A

** See image for Certificate of Correction **

TITLE: Microbial cholesterol dehydrogenase, process for its production and use

Full Title Citation Front Review Classification Date Reference Sequences Altachments Claims KWIC Draw De

☐ 26. Document ID: US 5032514 A

L4: Entry 26 of 34

File: USPT

Jul 16, 1991

US-PAT-NO: 5032514

DOCUMENT-IDENTIFIER: US 5032514 A

TITLE: Metabolic pathway engineering to increase production of ascorbic acid

intermediates

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw. De

☐ 27. Document ID: US 5008193 A

L4: Entry 27 of 34

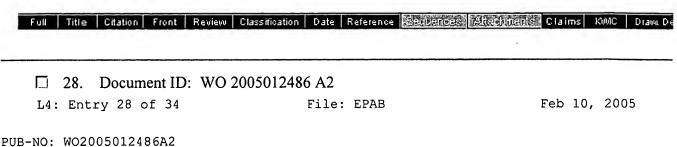
File: USPT

Apr 16, 1991

US-PAT-NO: 5008193

DOCUMENT-IDENTIFIER: US 5008193 A

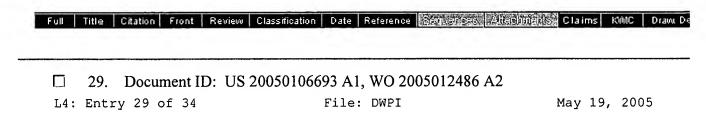
TITLE: Ascorbic acid intermediates and process enzymes



DOCUMENT-IDENTIFIER: WO 2005012486 A2

TITLE: METABOLICALLY ENGINEERED BACTERIAL STRAINS HAVING ENHANCED 2-KETO-D-

GLUCONATE ACCUMULATION

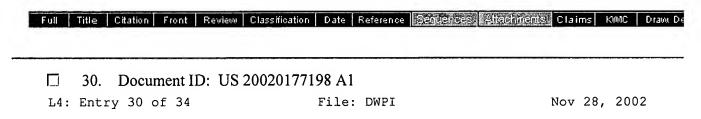


DERWENT-ACC-NO: 2005-132659

DERWENT-WEEK: 200534

COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Increasing accumulation of 2-keto-D-gluconic acid (2-KDG) in bacterial host cell, by inactivating endogenous gene encoding 2-keto-D-gluconate dehydrogenase which coverts 2-KDG to 2,5-diketogluconate



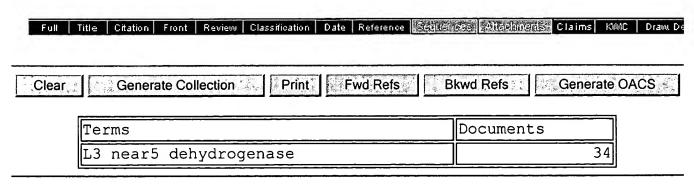
DERWENT-ACC-NO: 2003-370731

DERWENT-WEEK: 200572

COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Production of ascorbic acid intermediates e.g. 2,5-diketo-D-gluconate,

comprising enzymatically oxidizing carbon source



Change Format Display Format: |Previous Page

Next Page

Go to Doc#

Hit List

First Hit Clear Generate Collection Print Fwd Refs Bkwd Refs Generate OACS

Search Results - Record(s) 21 through 30 of 34 returned.

☐ 21. Document ID: US 6720168 B2

Using default format because multiple data bases are involved.

L4: Entry 21 of 34

File: USPT

Apr 13, 2004

US-PAT-NO: 6720168

DOCUMENT-IDENTIFIER: US 6720168 B2

TITLE: 2,5-DKG permeases

DATE-ISSUED: April 13, 2004

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Jul 29, 2003

Dartois; Veronique A.

San Diego

CA

Hoch; James A.

La Jolla

CA

Valle; Fernando

Burlingame

CA

Kumar; Manoj

Fremont

CA

US-CL-CURRENT: 435/72; 435/252.33, 536/27.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KMC	Draw, De
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	22.	Docum	ent ÏD	: US 6	599722 B2							

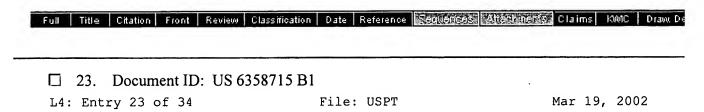
File: USPT

US-PAT-NO: 6599722

DOCUMENT-IDENTIFIER: US 6599722 B2

L4: Entry 22 of 34

TITLE: Method for producing ascorbic acid intermediates



US-PAT-NO: 6358715

DOCUMENT-IDENTIFIER: US 6358715 B1

Record List Display Page 2 of 4

TITLE: Production of ascorbic acid

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

☐ 24. Document ID: US 6337199 B1

L4: Entry 24 of 34

File: USPT

Jan 8, 2002

US-PAT-NO: 6337199

DOCUMENT-IDENTIFIER: US 6337199 B1

TITLE: Membrane-bound gluconate dehydrogenase, gene sequence encoding the same and production of 2-keto-D-gluconate using transformed recombinant E-coli

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw De

☐ 25. Document ID: US 5856156 A

L4: Entry 25 of 34

File: USPT

Jan 5, 1999

US-PAT-NO: 5856156

DOCUMENT-IDENTIFIER: US 5856156 A

** See image for Certificate of Correction **

TITLE: Microbial cholesterol dehydrogenase, process for its production and use

Full Title Citation Front Review Classification Date Reference <u>Sequences Attschineras</u> Claims KWIC Draw. De

☐ 26. Document ID: US 5032514 A

L4: Entry 26 of 34

File: USPT

Jul 16, 1991

US-PAT-NO: 5032514

DOCUMENT-IDENTIFIER: US 5032514 A

TITLE: Metabolic pathway engineering to increase production of ascorbic acid

intermediates

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KMC Draw. De

☐ 27. Document ID: US 5008193 A

L4: Entry 27 of 34

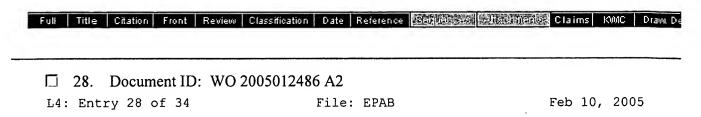
File: USPT

Apr 16, 1991

US-PAT-NO: 5008193

DOCUMENT-IDENTIFIER: US 5008193 A

TITLE: Ascorbic acid intermediates and process enzymes

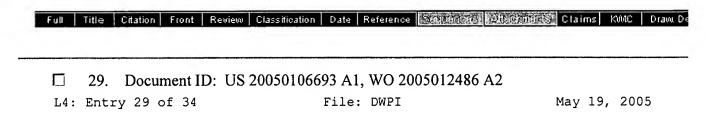


PUB-NO: WO2005012486A2

DOCUMENT-IDENTIFIER: WO 2005012486 A2

TITLE: METABOLICALLY ENGINEERED BACTERIAL STRAINS HAVING ENHANCED 2-KETO-D-

GLUCONATE ACCUMULATION

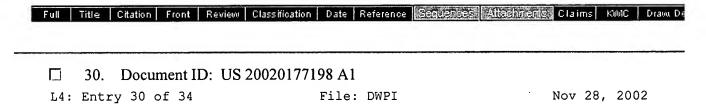


DERWENT-ACC-NO: 2005-132659

DERWENT-WEEK: 200534

COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Increasing accumulation of 2-keto-D-gluconic acid (2-KDG) in bacterial host cell, by inactivating endogenous gene encoding 2-keto-D-gluconate dehydrogenase which coverts 2-KDG to 2,5-diketogluconate

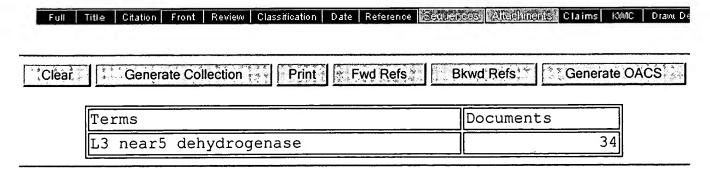


DERWENT-ACC-NO: 2003-370731

DERWENT-WEEK: 200572

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TITLE: Production of ascorbic acid intermediates e.g. 2,5-diketo-D-gluconate, comprising enzymatically oxidizing carbon source



Display Format: - Change Format

Previous Page

Next Page

Go to Doc#

Hit List

First Hit Clear Generate Collection Frint Fwd Refs Bkwd Refs
Generate OACS

Search Results - Record(s) 31 through 34 of 34 returned.

☐ 31. Document ID: AU 2001283132 A8, WO 200212481 A2, AU 200183132 A, EP 1305423 A2, JP 2004519213 W, MX 2003001026 A1

Using default format because multiple data bases are involved.

L4: Entry 31 of 34

File: DWPI

Sep 15, 2005

DERWENT-ACC-NO: 2002-241757

DERWENT-WEEK: 200569

COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Enhancing host cell's biosynthetic production of desired compound that is

derived from partially intracellular pathway by increasing transport of

extracellular substrate used in the synthetic pathway

INVENTOR: KUMAR, M; VALLE, F

PRIORITY-DATA: 2000US-0677032 (September 29, 2000), 2000US-0633294 (August 4, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
AU 2001283132 A8	September 15, 2005		000	C12N015/31
WO 200212481 A2	February 14, 2002	E	060	C12N015/00
AU 200183132 A	February 18, 2002		000	C12N015/00
EP 1305423 A2	May 2, 2003	E	000	C12N015/31
JP 2004519213 W	July 2, 2004		100	C12N015/09
MX 2003001026 A1	September 1, 2003		000	C12N015/00

INT-CL (IPC): $\underline{\text{C07}}$ $\underline{\text{K}}$ $\underline{14}/\underline{24}$; $\underline{\text{C12}}$ $\underline{\text{N}}$ $\underline{1}/\underline{21}$; $\underline{\text{C12}}$ $\underline{\text{N}}$ $\underline{15}/\underline{00}$; $\underline{\text{C12}}$ $\underline{\text{N}}$ $\underline{15}/\underline{09}$; $\underline{\text{C12}}$ $\underline{\text{N}}$ $\underline{15}/\underline{31}$; $\underline{\text{C12}}$ $\underline{\text{P}}$ $\underline{1}/\underline{00}$; $\underline{\text{C12}}$ $\underline{\text{P}}$ $\underline{7}/\underline{60}$

Full Title Citation Front Review Classification Date Reference Sentences Altachments Claims KMC Draw. De

32. Document ID: WO 200037667 A1, AU 200024855 A, EP 1141368 A1, CZ 200102285 A3, KR 2001093149 A, CN 1331749 A, BR 9916848 A, US 20020177197 A1, JP 2003517278 W, US 6599722 B2, MX 2001006337 A1, US 20040180413 A1

L4: Entry 32 of 34

File: DWPI

Jun 29, 2000

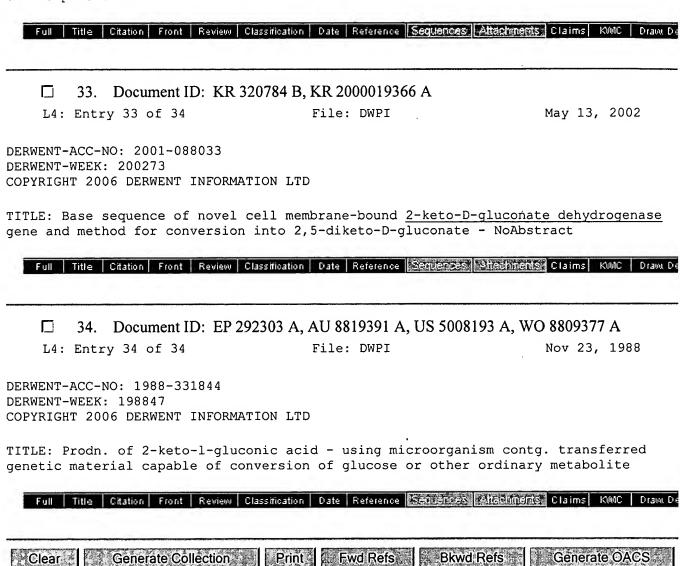
DERWENT-ACC-NO: 2000-442684

DERWENT-WEEK: 200572

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TITLE: Non-fermentative production of vitamin C intermediates, useful e.g. as antioxidant, by enzymatic oxidation of glucose and optionally enzymatic reduction

of the products



Display Format: - Change Format

Documents

34

Previous Page Next Page Go to Doc#

Terms

L3 near5 dehydrogenase

```
$\frac{1}{2}STN; HighlightOn= ***; HighlightOff=*** ;
Connecting via Winsock to STN
Welcome to STN International! Enter x:x
LOGINID: SSSPTA1800EXS
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2
 * * * * * * * * *
                     Welcome to STN International
                 Web Page URLs for STN Seminar Schedule - N. America
NEWS 1
                 "Ask CAS" for self-help around the clock
NEWS
                 CASREACT(R) - Over 10 million reactions available
NEWS 3 DEC 05
NEWS 4 DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE
NEWS 5 DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
NEWS 6 DEC 14 CA/Caplus to be enhanced with updated IPC codes
NEWS 7 DEC 21 IPC search and display fields enhanced in CA/CAplus with the
                 IPC reform
         DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
NEWS
NEWS 9 JAN 13
                IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 10 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
                 INPADOC
NEWS 11 JAN 17 Pre-1988 INPI data added to MARPAT
NEWS 12 JAN 17 IPC 8 in the WPI family of databases including WPIFV
NEWS 13 JAN 30 Saved answer limit increased
NEWS 14 JAN 31 Monthly current-awareness alert (SDI) frequency
                 added to TULSA
NEWS 15 FEB 21 STN AnaVist, Version 1.1, lets you share your STN AnaVist
                 visualization results
NEWS 16 FEB 22 Status of current WO (PCT) information on STN
NEWS 17 FEB 22 The IPC thesaurus added to additional patent databases on STN
NEWS 18 FEB 22 Updates in EPFULL; IPC 8 enhancements added
NEWS 19 FEB 27 New STN AnaVist pricing effective March 1, 2006
NEWS 20 FEB 28 MEDLINE/LMEDLINE reload improves functionality
NEWS 21 FEB 28 TOXCENTER reloaded with enhancements
NEWS 22 FEB 28 REGISTRY/ZREGISTRY enhanced with more experimental spectral
                 property data
NEWS 23 MAR 01
                INSPEC reloaded and enhanced
NEWS 24 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes
NEWS 25 MAR 08 X.25 communication option no longer available after June 2006
NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
              V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
              http://download.cas.org/express/v8.0-Discover/
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              Welcome Banner and News Items
NEWS PHONE
              Direct Dial and Telecommunication Network Access to STN
NEWS WWW
              CAS World Wide Web Site (general information)
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SINCE FILE TOTAL SESSION 0.21 0.21
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=> s 2-keto-D-glucon? or kdg L1 876 2-KETO-D-GLUCON? OR KDG

=> s l1 (3a) dehydrogenase L2 71 L1 (3A) DEHYDROGENASE

=> dup rem 12
PROCESSING COMPLETED FOR L2
L3 30 DUP REM L2 (41 DUPLICATES REMOVED)

=> d 1-10

L3 ANSWER 1 OF 30 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN DUPLICATE 1

AN 2005-08850 BIOTECHDS

New isolated polynucleotide encoding multimeric oxidoreductase complex having oxidoreductase activity and enabling enzymatic conversions of carbon substrate to desired product, useful as probe for detecting other CytC proteins;

recombinant enzyme production via plasmid expression in host cell for use in ascorbic acid production

AU CALDWELL R M; RASHID M H; VALLE F

PA GENENCOR INT INC

PI WO 2005012547 10 Feb 2005 AI WO 2004-US24204 27 Jul 2004

PRAI US 2003-491151 30 Jul 2003; US 2003-491151 30 Jul 2003

DT Patent LA English

OS WPI: 2005-162987 [17]

```
ANSWER 2 OF 30 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
L3
      DUPLICATE 2
AN
      2005-06959 BIOTECHDS
      Increasing accumulation of 2-keto-D-gluconic acid (2-KDG) in bacterial
TТ
                                                            ***2***
      host cell, by inactivating endogenous gene encoding
        ***keto*** - ***D*** - ***gluconate*** ***dich coverts 2- ***KDG*** to 2,5-diketogluconate;
                                                        ***dehydrogenase***
      which coverts 2- ***KDG***
         involving polymerase chain reaction
      DODGE T C; VALLE F; RASHID M H
AU
      GENENCOR INT INC
PA
PΙ
      WO 2005012486 10 Feb 2005
      WO 2004-US24203 27 Jul 2004
ΑI
PRAI US 2003-491150 30 Jul 2003; US 2003-491150 30 Jul 2003
DT
      Patent
      English
LA
os
      WPI: 2005-132659 [14]
      ANSWER 3 OF 30 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
L3
      DUPLICATE 3
AN
      2005-29262 BIOTECHDS
      Producing 2-keto-L-gulonic acid from carbon source, non-fermentatively,
ΤI
      involves oxidizing carbon source enzymatically using dehydrogenase
      enzymes having oxidative activity, and reducing oxidation product by
      reductase enzyme;
         2-keto-L-qulonic acid production using bacterium enzyme for use in
         food and pharmaceutical industry
      BOSTON M G; SWANSON B A
ΑU
PA
      BOSTON M G; SWANSON B A
ΡI
      US 2005227337 13 Oct 2005
      US 2003-470649 20 Nov 2003
ΑI
PRAI US 2003-470649 20 Nov 2003; US 1998-218700 22 Dec 1998
DT
      Patent
      English
LA
OS
      WPI: 2005-702119 [72]
     ANSWER 4 OF 30 HCAPLUS COPYRIGHT 2006 ACS on STN
L3
     2005:1023213 HCAPLUS
AN
DN
     143:324902
     Gluconic acid dehydrogenase-deficient microorganisms for the fermentation
TI
     of tartaric acid and 5-keto-D-gulonic acid from glucose
     Elfari, Mustafa; Bremus, Christoph; Khodaverdi, Viola; Merfort, Marcel;
IN
     Ha, Seung-Wook; Herrmann, Ute; Bringer-Meyer, Stephanie; Sahm, Hermann;
     Goerisch, Helmut
     Technische Universitaet Berlin, Germany; Forschungszentrum Juelich GmbH
PΑ
SO
     Ger. Offen., 42 pp.
     CODEN: GWXXBX
DΨ
     Patent
T.A
     German
FAN.CNT 1
                                           APPLICATION NO.
                                                                   DATE
     PATENT NO.
                        KIND DATE
                        ----
                                _ - - - - - - -
                          A1
                                            DE 2004-102004010786 20040305
     DE 102004010786
                                20050922
PΙ
                                20040305
PRAI DE 2004-102004010786
              THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 3
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 5 OF 30 HCAPLUS COPYRIGHT 2006 ACS on STN
L3
     2003:211765 HCAPLUS
AN
     138:363740
DN
     Sequence of the 165-kilobase catabolic plasmid pAO1 from Arthrobacter
TI
     nicotinovorans and identification of a pAO1-dependent nicotine uptake
     system
ΑU
     Igloi, Gabor L.; Brandsch, Roderich
CS
     Institute of Biology III, Freiburg, Germany
SO
     Journal of Bacteriology (2003), 185(6), 1976-1986
     CODEN: JOBAAY; ISSN: 0021-9193
PB
     American Society for Microbiology
DT
     Journal
     English
LA
              THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 48
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
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ANSWER 6 OF 30
                                                         DUPLICATE 4
                        MEDLINE on STN
L3
AN
     2003063187
                    MEDLINE
DN
     PubMed ID: 12573242
TI
     Cloning and expression of the gene encoding catalytic subunit of
     thermostable glucose dehydrogenase from Burkholderia cepacia in
     Escherichia coli.
     Inose Ken; Fujikawa Masako; Yamazaki Tomohiko; Kojima Katsuhiro; Sode Koji
AII
     Department of Biotechnology, Tokyo University of Agriculture and
CS
     Technology, 2-24-16 Naka-machi, Tokyo Koganei 184-8588, Japan.
     Biochimica et biophysica acta, (2003 Feb 21) Vol. 1645, No. 2, pp. 133-8.
so
     Journal code: 0217513. ISSN: 0006-3002.
     Netherlands
CY
     Journal; Article; (JOURNAL ARTICLE)
DT
LA
     English
     Priority Journals
FS
EM
     200305
ED
     Entered STN: 20030208
     Last Updated on STN: 20030508
     Entered Medline: 20030507
      ANSWER 7 OF 30 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
L3
      DUPLICATE 5
AN
      2002-11486 BIOTECHDS
      Enhancing host cell's biosynthetic production of desired compound that is
TI
      derived from partially intracellular pathway by increasing transport of
      extracellular substrate used in the synthetic pathway;
         vector-mediated gene transfer and expression in Pantoea sp. or
         Klebsiella sp. and sorbosone-dehydrogenase
      KUMAR M; VALLE F
ΑU
      GENENCOR INT INC
PΑ
PΙ
      WO 2002012481 14 Feb 2002
      WO 2000-US24600 4 Aug 2000
AΤ
PRAI US 2000-677032 29 Sep 2000
DТ
      Patent
LΑ
      English
OS
      WPI: 2002-241757 [29]
      ANSWER 8 OF 30 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
L3
      DUPLICATE 6
AN
      2003-15169 BIOTECHDS
      Production of ascorbic acid intermediates e.g. 2,5-diketo-D-gluconate,
TT
      comprising enzymatically oxidizing carbon source;
         involving fermentation and vector-mediated gene transfer and
         expression in host cell
AU
      BOSTON M G; SWANSON B A
      BOSTON M G; SWANSON B A
PA
      US 2002177198 28 Nov 2002
PΙ
      US 1999-470168 22 Dec 1999
ΑI
      US 1999-470168 22 Dec 1999; US 1998-218700 22 Dec 1998
PRAI
TC
      Patent
LA
      English
      WPI: 2003-370731 [35]
os
      ANSWER 9 OF 30 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN
L3
      DUPLICATE 7
      2003-05656 BIOTECHDS
AN
      Production of ascorbic acid or ascorbic acid stereoisomer in yeast by
TI
      obtaining yeast capable of utilizing 2-keto-L-gulonic acid, and culturing
      the yeast in the presence of carbon source;
         vitamin production via fungus culture medium fermentation for
         pharmaceutical
      KUMAR M
ΑU
PA
      KUMAR M
PΙ
      US 2002090688 11 Jul 2002
      US 2001-26139 18 Dec 2001
AI
      US 2001-26139 18 Dec 2001; US 1998-205874 4 Dec 1998
PRAI
DT
      Patent
LA
      English
      WPI: 2003-038807 [03]
OS
     ANSWER 10 OF 30 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 8
L3
```

- AN 2002:466617 HCAPLUS
- DN 137:32151
- TI Production of ascorbic acid using yeast
- IN Kumar, Manoj
- PA Genencor International, Inc., USA
- SO U.S. Pat. Appl. Publ., 11 pp., Cont.-in-part of Ser. No. US 1998-205874, filed on 4 Dec 1998

CODEN: USXXCO

- DT Patent
- LA English
- FAN.CNT 4

PATE	NT NO.	KIND	DATE	API	PLICATION NO.	DATE
PI US 2	002076771	A1	20020620	US	2001-26586	20011218
US 6	808918	B2	20041026			
US 6	358715	B1	20020319	US	1998-205874	19981204
PRAI US 1	998-205874	A2	19981204			

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 10 ab

L3 ANSWER 10 OF 30 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 8

AB The present invention provides for the prodn. of ascorbic acid (ASA) from yeast capable of producing ASA from 2-keto-L-gulonic acid. The present invention provides methods for the prodn. of ASA as well as recombinant yeast capable of producing ASA from a C source.

=> d 11-20

- L3 ANSWER 11 OF 30 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 2002:522531 HCAPLUS
- DN 137:78008
- TI Production of ascorbic acid
- IN Kumar, Manoj
- PA USA
- SO U.S. Pat. Appl. Publ., 11 pp., Cont.-in-part of U.S. Ser. No. 205,874. CODEN: USXXCO
- DT Patent
- LA English
- FAN.CNT 4

		PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
]	ΡI	US 2002090689	A1	20020711	US 2001-26587	20011218
		US 6358715	B1	20020319	US 1998-205874	19981204
]	PRAI	US 1998-205874	A2	19981204		

- L3 ANSWER 12 OF 30 MEDLINE on STN DUPLICATE 9
- AN 2001166025 MEDLINE
- DN PubMed ID: 11263965
- TI Cloning and expression of glucose 3-dehydrogenase from Halomonas sp. alpha-15 in Escherichia coli.
- AU Kojima K; Tsugawa W; Sode K
- CS Department of Biotechnology, Tokyo University of Agriculture and Technology, 2-24-16 Naka-machi, Koganei, Tokyo, 184-8588, Japan.
- SO Biochemical and biophysical research communications, (2001 Mar 23) Vol. 282, No. 1, pp. 21-7.
 - Journal code: 0372516. ISSN: 0006-291X.
- CY United States
- DT Journal; Article; (JOURNAL ARTICLE)
- LA English
- FS Priority Journals
- EM 200104
- ED Entered STN: 20010417

Last Updated on STN: 20010417 Entered Medline: 20010412

- L3 ANSWER 13 OF 30 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN DUPLICATE 10
- AN 2000-11875 BIOTECHDS

Non-fermentative production of vitamin-C intermediates, useful e.g. as TI antioxidant, by enzymatic oxidation of glucose and optionally enzymatic reduction of the products; ascorbic acid production with coenzyme regeneration ΑU Boston M G; Swanson B A PA Genencor Rochester, NY, USA. LO PΙ WO 2000037667 29 Jun 2000 AΤ WO 1999-US30918 22 Dec 1999 PRAI US 1998-218700 22 Dec 1998 DT Patent LA English WPI: 2000-442684 [38] OS ANSWER 14 OF 30 BIOTECHDS COPYRIGHT 2006 THE THOMSON CORP. on STN L_3 DUPLICATE 11 AN 2000-12700 BIOTECHDS Production of ascorbic acid, useful as pharmaceutical and food additive, ΤI from yeast using strains, optionally recombinant, able to convert 2-keto-L-gluconic acid; using Candida blankii and Cryptococcus dimennae culture ΑU Kumar M PA Genencor LO Rochester, NY, USA. PΙ WO 2000034502 15 Jun 2000 ΑI WO 1999-US28669 3 Dec 1999 PRAI US 1998-205874 4 Dec 1998 Patent DT LA English WPI: 2000-498750 [44] os ANSWER 15 OF 30 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 12 L3 AN2002:80715 HCAPLUS DN 136:97322 DNA sequence of Erwinia herbicola membrane-bound ***2*** ΤI - ***keto*** ***D*** - ***gluconate*** ***dehydrogenase*** and uses thereof in 2,5-diketo-D-gluconate production IN Shin, Yong Chul; Pan, Jae Gu; Yeom, Do Yeong Korea Institute of Science and Technology, S. Korea PA SO Repub. Korean Kongkae Taeho Kongbo, No pp. given CODEN: KRXXA7 DТ Patent Korean LA FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE -----_____ ----KR 2000019366 Α 20000406 KR 1998-37413 19980910 PΙ PRAI KR 1998-37413 19980910 ANSWER 16 OF 30 SCISEARCH COPYRIGHT (c) 2006 The Thomson Corporation on T.3 STN AN 1997:797429 SCISEARCH The Genuine Article (R) Number: YC935 GA Cloning and expression of a gene cluster encoding three subunits of ΤI membrane-bound gluconate dehydrogenase from Erwinia cypripedii ATCC 29267 in Escherichia coli Yum D Y (Reprint); Lee Y P; Pan J G ΑIJ KOREA RES INST BIOSCI & BIOTECHNOL, BIOPROC ENGN DIV, TAEJON 305600, SOUTH CS KOREA; LG CHEM LTD, BIOTECH RES INST, TAEJON 305380, SOUTH KOREA CYA SOUTH KOREA JOURNAL OF BACTERIOLOGY, (NOV 1997) Vol. 179, No. 21, pp. 6566-6572. so ISSN: 0021-9193. AMER SOC MICROBIOLOGY, 1325 MASSACHUSETTS AVENUE, NW, WASHINGTON, DC PΒ 20005-4171. DT Article; Journal FS LIFE LA English REC Reference Count: 40 ED Entered STN: 1997 Last Updated on STN: 1997 *ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*

```
ANSWER 17 OF 30 HCAPLUS COPYRIGHT 2006 ACS on STN
L_3
AN
    1995:370514 HCAPLUS
DN
    122:128000
TI
    Enzymic determination of 2-keto-D-gluconate and 5-keto-D-gluconate
ΔII
    Ameyama, M.; Shinagawa, E.; Matsushita, K.; Adachi, O.
CS
    Faculty Agriculture, Yamaguchi University, Yamaguchi, Japan
    Methods in Carbohydrate Chemistry (1994), 10, 75-8
SO
    CODEN: MCACAI; ISSN: 0097-3602
PR
    Wiley
DT
    Journal
    English
LA
    ANSWER 18 OF 30 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on
L3
                                                     DUPLICATE 13
    STN
    1994:184251 BIOSIS
AN
DN
    PREV199497197251
    Nonphosphorylated glucose catabolism by Penicillium citrinum.
TI
ΑU
    Elzainy, T. A.; Allam, A. M.
    Lab. Microbial Chemistry, National Res. Cent., Cairo, Egypt
CS
    Annali di Microbiologia ed Enzimologia, (1993) Vol. 43, No. 2, pp.
SO
    169-179.
    CODEN: AMEZAB. ISSN: 0003-4649.
DT
    Article
LA
    English
    Entered STN: 26 Apr 1994
ED
    Last Updated on STN: 25 Jun 1994
    ANSWER 19 OF 30 HCAPLUS COPYRIGHT 2006 ACS on STN
L3
AN
    1992:57516 HCAPLUS
DN
    116:57516
    Metabolic pathway engineering to increase production of ascorbic acid
ΤI
    intermediate 2-keto-L-qulonic acid
    Anderson, Stephen; Lazarus, Robert A.; Miller, Harvey I.; Stafford, R.
IN
    Kevin
PA
    Genentech, Inc., USA
SO
    U.S., 34 pp.
    CODEN: USXXAM
DT
    Patent
LA
    English
FAN.CNT 1
                                        APPLICATION NO.
                                                              DATE
    PATENT NO.
                      KIND DATE
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                                         US 1988-229598
                                                               19880808
    US 5032514
                        Α
                              19910716
PT
PRAI US 1988-229598
                              19880808
    ANSWER 20 OF 30 HCAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 14
T.3
     1989:402173 HCAPLUS
AN
DN
    111:2173
    Manufacture of ascorbic acid precursor ketogulonic acid with recombinant
ΤI
    microorganisms
     Anderson, Stephen; Light, David R.; Marks, Cara; Rastetter, William H.
IN
PA
    Genentech, Inc., USA
    Eur. Pat. Appl., 21 pp.
SO
    CODEN: EPXXDW
DT
    Patent
LA
    English
FAN.CNT 2
                                        APPLICATION NO.
                                                               DATE
    PATENT NO.
                      KIND
                              DATE
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     _____
    EP 292303
                                         EP 1988-304581
                        A1
                                                                19880520
                              19881123
ΡI
        R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
                              19910416
                                                                19870521
                                       US 1987-53290
     US 5008193
                        A
                             19881201
                                         WO 1988-US1669
                                                               19880519
     WO 8809377
                        A1
        W: AU, JP
                        A1
                                         AU 1988-19391
                                                               19880519
     AU 8819391
                              19881221
     AU 612672
                        B2
                              19910718
PRAI US 1987-53290
                        Α
                              19870521
    US 1983-508410
                        B2
                              19830628
                       B2
     US 1984-620585
                              19840614
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WO 1988-US1669

Α

19880519

(FILE 'HOME' ENTERED AT 13:41:42 ON 10 MAR 2006)

FILE 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS, ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 13:41:52 ON 10 MAR 2006

876 S 2-KETO-D-GLUCON? OR KDG

71 S L1 (3A) DEHYDROGENASE L2

30 DUP REM L2 (41 DUPLICATES REMOVED) L3

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